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ABSTRACT

To assess the effectiveness of a 3-month inservice program in vocational education for high school counselors, data were gathered from 60 non-college bound students (experimental group) whose counselors participated in the 3-month program and 60 non-college bound students (Control group) whose counselors did not participate in the program. Pre- and post-data on selected affective and cognitive behaviors were gathered from the 120 students immediately before or within the first week of the inservice training and immediately after termination of training. Data analysis revealed that there were no significant differences between the two groups, except in one of the cognitive measures in which the experimental group demonstrated greater growth by being able to correctly identify the education or training required by an occupation. The inadequacy of the present vocational counseling and guidance service offered secondary students was supported by these results: (1) Less than 60 percent of either group were able to identify a career choice, (2) Less than half of those who did identify a career choice were able to identify or describe the job cluster to which the career belonged, and (3) Less than 25 percent of the two groups were able to identify or give requested information about two community agencies providing job placement services. (SB)

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TABLE OF CONTENTS

		Page
I.	Background	1
II.	Statement of the Problem	1
III.	Delimitations of the Problems	2
IV.	Sources and Collection of Data	3
V.	Treatment of Data	5
VI.	Hypothesis to be Tested	5
VII.	Research Design	5
VIII.	Source of Data	6
IX.	Data Analysis	6
	Items 1, 2 and 3	7
	Item 4	12
	Item 6	15
	Item 5	17
	Item 10	21
	Item 11 and 12	21
X.	Conclusions	23
XI.	Discussion	23
XII.	Appendix	28
	A. Course of Study	29
	B. Sacramento County High Schools Student Questionnaire	32
	C. Questionnaire to Participants in the Vocational Counseling Inservice	44
	D. Counselor Inservice Enrollees	45

TABLES

			PAGE
Table	I:	Rank Ordering of Contacts or Resources Students Would Utilize in Occupational Training	8
Table	II:	Rank Order of Mean Scores for Resources Which Students Would Utilize in Occupational Planning	9
Table	III:	Student's Perceptions of Their Ability in Fifteen (15) Areas of Behavior	10
Table	IV:	Student's Perceptions of Their Ability in Fifteen (15) Areas of Behavior	11
Table	V:	Percentage Scores of Students' Statements of Their Feelings About Themselves in Relation to School, Occupations and Making Decisions	13-14
Table	VI:	Mean Scores From a Numerical 5 to 1 Rating Scale Which Asks Students to Rate How They Feel About Themselves in Relation to School, Occupations and Decision Making	16
Table	VII:	Mean Rating Scores by Twelve Occupations Rated by High School Students	18
Table	VIII:	Percentages of Students in the Experimental and Control Groups Who Checked "Right", "Wrong" or "Don't Know" on the Level of Education Most Likely Needed for Nineteen Selected Occupations	19-20
Table	IX:	Percentage of Students' "Right" Responses to Questions on an Occupation of Their Choice or Interest	22
Table	X:	Percentage Distributions of Responses to Questions on the Use of Vocational Aptitude Tests	24
Table	XI:	Percentage Distribution of Responses to Questions on the Use of Vocational Interest Inventories	24

BACKGROUND

If a fundamental purpose of education in the public school is to prepare society's youth to function efficiently in the world of work, the system for a significant portion of the younger citizen has been, at best, dismally weak and, at the worst, approaches abysmal failure. It is not the aim of this study to determine the cause of this deficiency. Rather, its central thrust was to examine one aspect of an attempt to incorporate within the basic educational process a practical means whereby students can be helped in making more meaningful vocational decisions.

Six career guidance counselors employed by the Sacramento County Office of Education functioning within the thirty-four high schools in the County provide career guidance and counseling services to all students in each of the high schools to which they have been assigned. However, the counseling staff within each high school must also provide, as a normal continuing service, career guidance and counseling information to the total pupil population. To further this end the Sacramento County Office of Education implemented a program of inservice training in vocational guidance for thirty high school counselors. This specialized training course was initiated in 1972 and what follows is an attempt to assess the outcome of that inservice training.

STATEMENT OF THE PROBLEM

Will counselees of counselors who participated in an inservice training program in vocational education show measurably greater growth in affective and cognitive behaviors accepted as being important to the making of career decisions than will students of counselors who did not participate in such an inservice training program?

DELIMITATIONS OF THE PROBLEM

The data reported here were gathered from sixty (60) students enrolled in high schools in Sacramento County. Thirty students whose high school counselors were participants in a three month inservice training program in vocational counseling made up the "experimental group"; thirty students whose high school counselors were not participants in the inservice training comprised the "control group."

In one school district a career counselor from the Sacramento County Office of Education administered a pre-inservice questionnaire to the students in both the control and experimental group. The remaining pre- and post-inservice questionnaires were administered exclusively by Mr. Tom Abellera, Career Counselor, County Office of Education, and Mr. Jerry Simmons, graduate student, University of California - Sacramento.

A number of school counselors in the inservice stated that they knew the identities of some of the respondents to the questionnaire. All counselors stated that they had not spent a disproportionate time counseling such students and, in some instances, had had very little contact with the latter since the questionnaires had been administered.

Since the assessment of the effects of the instruction, time-wise, coincided with the completion of the inservice training, the measurements must be considered as only a preliminary result. A longitudinal study of both groups of counselees would be most desirable.

SOURCES AND COLLECTION OF DATA

The subjects of the study were one hundred and twenty (120) high school and continuation school students from Sacramento County. Sixty (60) of the students were counselees of counselors participating in an inservice training program. This group of students was designated as the "experimental" group. The other sixty (60) students were counselees of counselors not participating in the experiment and were designated as the "control" group.

A stratified random sample method was used to pick the students in each of the groups. The following controls were used in obtaining the stratified random sample: (1) college-bound students were eliminated from both the experimental and control groups; (2) both groups were matched for sex; (3) both groups were matched for grade level; and (4) both groups were matched for educational environment.

Since the inservice training program was oriented primarily toward vocational counseling, it was decided to eliminate those students who were taking primarily college-bound courses and students whom the school counselor felt would be going to college upon graduation from high school. Wherever possible, one male and one female counselee were picked for each counselor in both groups. However, one counselor had only female counselees and another had only male counselees in the experimental group. So, the same situation was provided for in the control group. The experimental group consisted of thirty (30) males and thirty (30) females as did the control group. Also, both groups were matched as to grade level. For instance, the experimental group had one male and one female from the ninth grade and the control group matched this situation. Every male and female in the experimental group was matched for grade and educational environment with a member of the control group.

The students in the control group came from schools, within Sacramento County, that had no counselors participating in the in-service training program. This was done to eliminate as much contamination as possible. It was felt that to have experimental and control group students from the same school would jeopardize the results of the experiment.

The Sacramento County Office of Education was able to obtain the names of all students in high schools and continuation schools in Sacramento County. With the assistance of the school counselors, a list of every student assigned to each counselor in the inservice training program was typed and using a random table (Rand Corporation, 1955) a random sample of students was selected. Each counselor participating in the inservice training was then presented a list of the names of the students in the random sample who were their counselees and were asked to go down the list, starting with the first name, and to identify the first student who met the requirements for participation in the experiment. Such a student then became a participant in the experiment. The same procedure was used in selecting the control group.

In most cases, Mr. Tom Abellera, Career Counselor, County Office of Education, and Mr. Jerry Simmons, graduate student, University of California -- Sacramento, administered the questionnaire to the experimental and control group students. The exception was one school district where a Career Counselor for the County Office administered the questionnaire.

Seventy-five percent of the questionnaires had been administered prior to the first inservice session on February 2, 1972. The remaining twenty-five percent were given in an interim period of the first and third inservice sessions. The post-test questionnaire which was identical to

the pre-test questionnaire was administered during the week of May 15-19, 1972.

TREATMENT OF DATA

The instrument used for the study was a twelve page questionnaire which was developed by the Vocational Education Department, Sacramento County Office of Education, with the assistance of the inservice training instructor and two graduate students from the University of California - Sacramento.

Two categories of behaviorial objectives, affective and cognitive, were utilized and the questionnaire was designed to measure behaviors considered appropriate to the two categories. The affective behaviors measured were attitudes, beliefs and values about "self", the "world of work", and the role the school and adults have in career counseling. The cognitive behaviors were the ability to: (1) identify at least two vocational interest inventories and two tests of aptitudes; (2) to identify at least one career cluster and to provide selected information on at least one career in the cluster; and (3) to identify and provide selected information on at least two community facilities which provide job placement services.

HYPOTHESIS TO BE TESTED

There will be no significant differences in the measured affective and cognitive behaviors of an experimental group of students counseled by counselors who participate in an inservice training program in vocational counseling and of a control group of students counseled by counselors who have not been exposed to the inservice training program.

RESEARCH DESIGN

A two-by-two experimental design, pre- and post measures of

control and experimental groups, was used. By random sampling one hundred and twenty non-college bound students, 60 counselees of counselors taking part in the inservice training and 60 counselees of counselors not participating in the inservice training, were identified in the student populations of the participating schools.

Pre- and post-data on selected affective and cognitive behaviors of all identified counselees were gathered immediately before or within the first week of the inservice training and immediately after the termination of the training.

SOURCE OF DATA

Students in grades nine through twelve from high schools, which included continuation schools, representing all school districts in Sacramento County were the source of the data used in this study. The subjects consisted of an equal number of boys and girls divided into a control group and an experimental group. Responses to a pre/post questionnaire that was administered to each of these students yielded the research data. Information contained in the questionnaire was used previously in a doctoral thesis and its validity and reliability were established at that time.

DATA ANALYSES

Items 1, 2, 3, 4 and 6 were considered to be measures of affective behavior - students' attitudes about self, others, occupational information and about occupations - factors which often influence vocational decision making. Items 5, 10, 11 and 12 are measures of cognitive behavior - students' knowledge of occupational information and its use in vocational decision making. The analyses of the data were grouped under those two headings.

ITEMS 1, 2 AND 3

Item 1, page 1 of the questionnaire asked the student to indicate on a five interval, ordinal scale how often he or she would use each of seven listed contacts or resources (number 8 was "other") in occupational planning. Table I indicates the percentages of students in the experimental and control groups who checked each of the five scales for each of the listed categories on both the pre- and post-administrations of the survey. Using ordinal scale values from 1 ("not at all") to 5 ("very much"), mean student scores were computed for each of seven categories (no student responses were made in the category "other") for both pre- and post-administrations of the survey. Differences between students' mean scores on the pre- and post-administrations were also computed. Mean scores and rank order of mean scores are summarized in Table II.

It was hypothesized that positive vocational counseling would be reflected in high rankings being given to counselor, films and pamphlets and work experience, and lower rankings being given to friends and parents and relatives.

From a visual inspection of Tables I and II, it was concluded that no significant differences are found between pre and post precentages or mean scores within either of the groups or between the two groups. Therefore, a null hypothesis of no difference was supported.

To assess what changes, if any, had taken place in students' perceptions of their abilities and interests, chi-squares of difference between pre and post rankings were computed for each of the variables for both the control and experimental groups. As can be seen from Tables III and IV, both groups showed changes at the 5% level of confidence in both of the areas. Therefore, the null hypothesis of no change was not supported. However, since the changes in both groups

TABLE I

RANK ORDERING OF CONTACTS OR RESOURCES
STUDENTS WOULD UTILIZE IN OCCUPATIONAL TRAINING[1]

Experimental Group						Control Group					
Pre Test			Post Test			Pre Test			Post Test		
Rank	Category/Resource	%*	Rank	Category/Resource	%*	Rank	Category/Resource	%*	Rank	Category/Resource	%*
1	work experience	73	1	work experience	76	1	work experience	67	1	work experience	69
2	counselor	67	2	counselor	63	2	parents/relatives	64	2	parents/relatives	66
3	parents/relatives	45	3	parents/relatives	43	3	counselor	51	3	counselor	52
4	films & pamphlets	35	4	films & pamphlets	33	4	friend	42	4	friend	42
5	teacher	22	5-6	teacher	23	5	films & pamphlets	33	5	films & pamphlets	25
6	friend	21	5-6	friend	23	6	teacher	28	6	teacher	25
7	administrator	20	7	administrator	18	7	administrator	13	7	administrator	15

[1] Five scales of the instrument were collapsed into three scales: very much (5) + much (4), some (3), little (2) + not at all (1).

*Percent of respondents who checked the category.

TABLE II

RANK ORDER OF MEAN SCORES FOR RESOURCES
WHICH STUDENTS WOULD UTILIZE IN OCCUPATIONAL PLANNING[1]

Experimental Group						Control Group					
Pre Test			Post Test			Pre Test			Post Test		
Rank	Category or Resource		Rank	Category or Resource		Rank	Category or Resource		Rank	Category or Resource	
1	work experience	4.08	1	work experience	4.18	1	work experience	4.03	1	work experience	4.00
2	counselor	3.68	2	counselor	3.75	2	parents/relatives	3.73	2	parents/ relatives	3.73
3	parents/relatives	3.45	3	parents/relatives	3.46	3	counselor	3.50	3	counselor	3.53
4	films & pamphlets	2.91	4	friend	2.95	4	friend	3.38	4	friend	3.41
5	friend	2.91	5	films & pamphlets	2.93	5	films & pamphlets	3.10	5	films and pamphlets	3.18
6	teacher	2.86	6	teacher	2.88	6	teacher	2.88	6	teacher	2.83
7	administrator	2.46	7	administrator	2.46	7	administrator	2.36	7	administrator	2.43

[1]very much = 5, much = 4, some = 3, little = 2, very little = 1

From the examination of Tables I and II, it was concluded that, although some differences existed between the rank orders of the experimental and control group (based on pre test), the two groups did not differ significantly in the characteristics measured. Further, it was concluded that no significant change in rank orders were observed between the pre and post tests for either the experimental or control groups. Therefore, it was concluded that no significant difference existed between the two groups at the conclusion of the experimental period.

TABLE III

STUDENTS' PERCEPTIONS OF THEIR ABILITY IN FIFTEEN (15) AREAS OF BEHAVIOR

N - Experimental Group = 60 N - Control Group = 60

	ABILITY					
	Experimental Group			Control Group		
	X^2	DF	P	X^2	DF	P
Writing	2.846	4	.05	.342	4	.05
Reading	2.138	4	.05	.376	4	.05
Mathematics	.720	4	.05	3.206	4	.05
Artistic	1.422	4	.05	.180	4	.05
Athletic	1.600	4.	.05	.635	4	.05
Musical	2.002	4	.05	.212	4	.05
Making Good Grades	.340	4	.05	.312	4	.05
Scientific	.788	4	.05	.330	4	.05
Mechanical	1.076	4	.05	.284	4	.05
Leadership	3.876	4	.05	.642	4	.05
Dramatic	1.336	4	.05	.048	4	.05
Making Friends	2.502	4	.05	.217	4	.05
Self-Discipline	1.422	4	.05	1.476	4	.05
Making Reasonable Decisions	.856	4	.05	.366	4	.05
Taking Risks When Necessary	.502	4	.05	1.208	4	.05

X^2 = Chi Square

DF = Degrees of Freedom

P = Level of Significance

TABLE IV

STUDENTS' PERCEPTIONS OF THEIR ABILITY IN FIFTEEN (15) AREAS OF BEHAVIOR

N - Experimental Group = 60 N - Control Group = 60

	INTEREST					
	Experimental Group			Control Group		
	X^2	DF	P	X^2	DF	P
Artistic	1.064	4	.05	1.502	4	.05
Athletic	1.790	4	.05	2.456	4	.05
Dramatic	1.418	4	.05	1.776	4	.05
Leadership	4.318	4	.05	.730	4	.05
Making Friends	3.132	4	.05	3.300	4	.05
Making Reasonable Decisions	2.992	4	.05	1.154	4	.05
Mathematics	.432	4	.05	1.382	4	.05
Making Good Grades	.490	4	.05	1.170	4	.05
Mechanical	.378	4	.05	3.630	4	.05
Musical	.388	4	.05	3.852	4	.05
Reading	1.864	4	.05	.346	4	.05
Scientific	1.236	4	.05	2.750	4	.05
Self-Discipline	3.332	4	.05	2.262	4	.05
Taking Risks When Necessary	1.060	4	.05	2.058	4	.05
Writing	.518	4	.05	1.242	4	.05

X^2 = Chi Square

DF = Degrees of Freedom

P = Level of Significance

were accepted as being significant, there was no support offered for the experimental hypothesis: students in the experimental group would, because of their contact with counselors who participated in the inservice workshop in vocational counseling and guidance, show significant, positive changes in selected perceptions about "self."

ITEM 4

The thirteen statements of Item 4 were intended to assess students' knowledge of and attitude toward selected factors considered to be important, if not vital, to the making of vocational decisions. It was hypothesized that effective vocational counseling would result in students having a more "accurate" knowledge of and a more "positive" attitude toward those factors. It was hypothesized that students in the experimental groups would give higher ratings to Items 1, 2, 3, 7, 8, 10 and 11 on the post administration of the survey than had been given on the pre administration and a lower rating to Items 4, 5, 6, 9, 12 and 13 on the post administration than had been given on the pre administration. The control group would show no change.

Table V gives the percent of the students in the experimental and control groups who checked each of the 5 scales for each of the 13 statements on the pre and post administration of the survey. Table VI gives both the pre and post mean scores for the experimental and control groups for each of the 13 statements and the change in mean scores from pre and post administrations.

In Table V columns 1 and 2, and 4 and 5 have been collapsed. A change of five percentage points or more in the direction predicted was accepted as significant. Only one change "control group - question 3" met this criteron.

TABLE V

PERCENTAGE SCORES OF STUDENTS' STATEMENTS OF THEIR FEELINGS ABOUT THEMSELVES IN RELATION TO SCHOOL, OCCUPATIONS AND MAKING DECISIONS

N - Experimental Group = 60			N - Control Group = 60
	(1) Strongly Agree and (2) Agree	Neither Agree or Disagree	(4) Disagree and (5) Strongly Disagree
	%	%	%
Question #1			
Pre Exp	17	55	28
Post Exp	20	54	26
Pre Cont	20	57	23
Post Cont	25	52	23
Question #2			
Pre Exp	62	23	15
Post Exp	58	25	17
Pre Cont	74	13	13
Post Cont	67	17	16
Question #3			
Pre Exp	63	27	10
Post Exp	65	26	9
Pre Cont	67	23	10
Post Cont	74	23	3*
Question #4			
Pre Exp	88	12	
Post Exp	90	10	
Pre Cont	83	13	4
Post Cont	88	10	2
Question #5			
Pre Exp	28	38	34
Post Exp	27	41	32
Pre Cont	30	32	38
Post Cont	30	33	37
Question #6			
Pre Exp	43	32	25
Post Exp	43	35	22
Pre Cont	32	27	41
Post Cont	35	25	40

TABLE V (continued)

	(1) Strongly Agree and (2) Agree	Neither Agree or Disagree	(4) Disagree and (5) Strongly Disagree
	%	%	%
Question #7			
Pre Exp	39	18	43
Post Exp	35	24	41
Pre Cont	32	28	40
Post Cont	32	28	40
Question #8			
Pre Exp	83	9	8
Post Exp	85	10	5
Pre Cont	77	15	8
Post Cont	81	12	7
Question #9			
Pre Exp	13	13	74
Post Exp	14	16	70
Pre Cont	12	13	75
Post Cont	12	10	78
Question #10			
Pre Exp	87	7	6
Post Exp	88	8	4
Pre Cont	95		5
Post Cont	100		
Question #11			
Pre Exp	9	18	73
Post Exp	10	23	67
Pre Cont	12	23	65
Post Cont	10	29	61
Question #12			
Pre Exp	78	17	5
Post Exp	75	20	5
Pre Cont	75	16	9
Post Cont	80	15	5
Question #13			
Pre Exp	32	23	45
Post Exp	34	25	41
Pre Cont	20	30	50
Post Cont	20	33	47

Inspection of the mean scores and the differences in mean scores, Table VI, shows that responses to statements 1, 3, 4, 7, 8, 10, 11 and 12 changed in the direction hypothesized.

However, for all these statements, other than 12, the changes for the control group were not different from or were greater than the changes reported for the experimental group. The change in the responses to statement 12 (-.04) appears to be too small to be significant. Both groups' changes in responses to items 2, 6 and 9 were in an inverse order to that hypothesized. The experimental group showed no change in the responses to statement 5.

ITEM 6

The rationale for item 6 is based on the generally accepted work ethic that, although the values society ascribes to occupations covers a broad continuum, all legitimate occupations have an intrinsic positive value, and on the three related hypotheses:

(1) an individual's occupational aspirations and job performance are directly affected by the individual's acceptance of this ethic;

(2) a growing segment of the population's rejection of this ethic has had a negative affect upon the vocational aspirations of young adults;

(3) and, effective vocational counseling and guidance will develop a greater acceptance of the ethic, and, thus, generate more productive occupational aspirations and expectations in young adults.

TABLE VI

MEAN SCORES FROM A NUMBERICAL 5 TO 1 RATING SCALE WHICH ASKS STUDENTS TO RATE HOW THEY FEEL ABOUT THEMSELVES IN RELATION TO SCHOOL, OCCUPATIONS AND DECISION MAKING

The following rating scale was utilized:

5 = Strongly Agree 4 = Agree 3 = Neither Agree or Disagree 2 = Disagree 1 = Strongly Disagree

NOTE: The actual questions can be found on page 4 of the questionnaire in the Appendix.

Experimental

N = 60	Q-1	Q-2	Q-3	Q-4	Q-5	Q-6	Q-7	Q-8	Q-9	Q-10	Q-11	Q-12	Q-13
Pre $\bar{X}$	2.85	3.70	3.77	4.48	2.95	3.30	2.82	4.00	2.12	4.10	2.12	3.97	2.72
Post $\bar{X}$	2.92	3.65	3.80	4.47	2.95	3.37	2.85	4.10	2.18	4.22	2.23	3.93	2.75
D	+.07	-.05	+.03	-.01	.00	+.07	+.03	+.10	+.06	+.12	+.11	-.04	+.03

Control

N = 60	Q-1	Q-2	Q-3	Q-4	Q-5	Q-6	Q-7	Q-8	Q-9	Q-10	Q-11	Q-12	Q-13
Pre $\bar{X}$	2.90	3.50	3.73	4.23	2.90	2.98	2.98	3.93	2.08	4.25	2.30	3.88	2.62
Post $\bar{X}$	2.97	3.75	3.95	4.43	3.02	3.08	3.07	4.15	2.22	4.62	2.57	4.18	2.87
D	+.07	+.25	+.22	+.20	+.12	+.10	+.09	+.22	+.14	+.37	+.27	_.30	+.25

X = Mean D = Difference between Means

The null hypotheses tested were:

(1) there will be no significant differences between the mean pre and post scores of the control or experimental groups;

(2) there will be no significant changes in the pre and post scores of the two groups.

From the visual inspection of Table VII it can be seen that the total mean scores of both the experimental and control groups showed small, positive gains (experimental - .14 and control - .06). Shifts in scores for either group were not accepted as being significant: experimental - 4 positive, 5 no change (a shift of less than .5), and 3 negative; control - 3 positive, 5 no change and 4 negative. It was, therefore, concluded that the null hypotheses of "no change" was supported.

ITEM 5

Students were asked to indicate which of six levels of education would be most likely to be needed for each of nineteen (19) listed occupations (see Table VIII). The student could also check the answer "don't know." The responses were categorized as "right", "wrong" and "don't know." Table VIII gives the percentages of the responses in each of the categories for each of the occupations on both the pre and post administrations of the questionnaire. A change of five percentage points in "right" answers was accepted as being significant. Six significant changes (doctor, clerk in a department store, banker, truck driver, policeman and electronic technician) were found in the experimental group. No significant changes were found in the control group. This gave some support to the hypothesis that the students in the experimental group will show a positive growth in their knowledge about occupations.

TABLE VII

MEAN RATING SCORES BY TWELVE OCCUPATIONS RATED BY HIGH SCHOOL STUDENTS[1]

N = 120 (experimental, 60; control, 60)

Occupation	Group	Rating Periods Pre	Post	Change
Typist	Exp	5.22	5.27	.05
	Cont	4.83	2.77	-.06
Carpentar	Exp	5.24	5.35	.11
	Cont	5.05	5.03	-.02
Bookkeeper	Exp	5.05	5.06	.01
	Cont	4.71	4.72	.01
Telephone Lineman	Exp	4.86	4.80	-.06
	Cont	4.90	5.85	-.05
Auto Mechanic	Exp	5.04	5.06	.02
	Cont	4.69	4.85	+.16
Mail Carrier	Exp	4.71	4.56	-.15
	Cont	4.45	4.48	.03
Beautician	Exp	3.55	3.47	-.08
	Cont	4.19	4.12	-.07
Plumber	Exp	4.73	4.75	.02
	Cont	4.64	4.58	-.06
Practical Nurse	Exp	5.29	5.33	.04
	Cont	5.49	5.49	.00
Barber	Exp	3.77	3.93	.16
	Cont	3.82	3.89	.07
Short Order Cook	Exp	4.22	4.27	.05
	Cont	4.04	4.10	.06
Telephone Operator	Exp	5.04	5.06	.02
	Cont	4.69	4.85	+.16
		$\bar{m}$	$\bar{m}$	$\bar{m}$
TOTAL	Exp	56.93 4.74	57.07 4.76	.14 1.17
	Cont	56.09 5.09	56.15 4.67	+.06 .50

[1] Mean based on 1 through 5 rating: 7 interval scale collapsed to 5.

TABLE VIII

PERCENTAGES OF STUDENTS IN THE EXPERIMENTAL AND CONTROL GROUPS WHO CHECKED "RIGHT", "WRONG" OR "DON'T KNOW" ON THE QUESTION OF THE LEVEL OF EDUCATION MOST LIKELY NEEDED FOR NINETEEN SELECTED OCCUPATIONS

N - Experimental Group = 60 N - Control Group = 60

R = Right W = Wrong DK = Don't Know

		EXPERIMENTAL			CONTROL		
		R (%)	W (%)	DK (%)	R (%)	W (%)	DK (%)
Doctor	Pre	78	10	12	82	6	12
	Post	83	10	7	80	5	15
Plumber	Pre	28	42	30	32	28	40
	Post	27	43	30	33	25	42
Chemical Engineer	Pre	15	35	50	8	47	45
	Post	17	33	50	10	53	37
Lawyer	Pre	65	10	25	60	20	20
	Post	58	14	18	58	24	18
Clerk in a Department Store	Pre	70	25	5	68	19	13
	Post	78	15	7	70	20	10
Barber	Pre	25	59	16	17	65	18
	Post	30	57	13	18	67	15
Architect	Pre	14	46	40	13	45	42
	Post	11	49	40	8	55	37
High School English Teacher	Pre	72	12	16	76	7	17
	Post	74	10	16	80	0	20
Policeman	Pre	13	52	35	12	57	31
	Post	18	50	32	13	54	33
Truck Driver	Pre	53	34	13	50	25	25
	Post	58	30	12	53	24	23
Nurse	Pre	38	39	23	57	23	20
	Post	40	36	24	56	24	20
Secretary	Pre	26	54	20	38	47	15
	Post	19	52	29	41	46	13
Electronics Technician	Pre	40	28	32	38	27	35
	Post	50	18	32	41	22	37
Computer Programmer	Pre	48	19	33	54	13	33
	Post	46	19	35	58	12	30

TABLE VIII (continued)

R = Right W = Wrong DK = Don't Know

		EXPERIMENTAL			CONTROL		
		R (%)	W (%)	DK (%)	R (%)	W (%)	DK (%)
Electrician	Pre	8	54	38	13	52	35
	Post	12	55	33	16	49	35
Social Worker	Pre	10	57	33	18	44	38
	Post	7	55	38	13	44	43
Department Store Manager	Pre	29	33	38	38	25	37
	Post	25	33	42	42	24	34
Auto Mechanic	Pre	15	60	25	12	63	25
	Post	17	51	32	13	60	27
Airline Stewardess	Pre	31	37	32	31	37	32
	Post	15	50	35	29	41	30

Occupational Outlook Handbook (1970-71) was used to determine most likely level of education or training needed for each of the above occupations.

ITEM 10

Item 10 asked the student to identify his or her career choice or a career in which he or she might be interested. Nine questions assessed a student's knowledge of occuputional information related to his or her choice. The responses were treated as a forced choice dichotomy, right or wrong. Students' responses are summarized in Table IX.

It was hypothesized that the students in the experimental group would exhibit a significantly higher percent of correct responses on the post administration of the instrument and that the control group responses would not change. From the visual inspection of Table IX, it can be seen that on five of the questions (1, 2, 5, 6 and 9) the percent of the students making correct responses was smaller on the post administration than on the pre administration. On four remaining questions students in both groups did score higher on the post administration but the gains made by the experimental group did not differ significantly from those made by the control group.

Therefore, it was concluded that the hypothesized results were not achieved and that null hypotheses of "no change" and "no difference" were supported.

ITEMS 11 AND 12

Items 12 and 13 assessed a student's knowledge of standardized measures of aptitude (11) and interest (12) which could be used in making career decisions. Responses were categorized as "right", "wrong", or "don't know." It was hypothesized that the members of the experimental group would make a significantly greater number of "right" responses and fewer "wrong" or "don't know" responses on the post administration of the instrument, and that the control group would show no significant change.

TABLE IX

PERCENTAGE OF STUDENTS "RIGHT" RESPONSES TO QUESTIONS ON AN OCCUPATION OF THEIR CHOICE OR INTEREST

N - Experimental Group = 60 N - Control Group = 60

	EXPERIMENTAL			CONTROL		
	Pre (%)	Post (%)	Chg (%)	Pre (%)	Post (%)	Chg (%)
Students who indicated a career choice or career they might be interested in	58	55	-3	54	53	-1
Of those students responding to the above statement, the following percentages show how they responded to the following:						
1. Able to identify job cluster of identified career or job	38	36	-2	41	40	-1
2. Able to identify other jobs found in job cluster	35	34	-1	34	30	-4
3. Able to identify minimum level of education required for job	78	80	+2	74	77	+3
4. Able to identify aptitudes needed for job	51	55	+4	54	55	+1
5. Able to identify opportunities for advancement in the job	45	40	-5	52	47	-5
6. Identified personal interests related to job	27	25	-2	30	25	-5
7. Identified employment opportunities for such job	45	50	+5	45	47	+2
8. Able to identify whether job requires license, credential, written examination, apprenticeship or union membership which would be generally required for employment in the job	35	36	+1	32	35	+3
9. Those students able to identify and provide selected information on at least two community agencies	17	16	-1	13	15	-2

The following observations can be made from the summaries presented in Tables X and XI:

(1) The two groups had identical distributions of answers on the pre administration of the instrument;

(2) No significant changes in student responses were made in either of the two groups;

(3) The experimental and control groups responses did not differ significantly on either the pre or post administration of the instrument.

Therefore, it was concluded that the theoretical hypotheses was not supported and null hypotheses of "no difference" and "no change" were supported.

CONCLUSIONS

(1) The experimental and control groups did not differ significantly in any of the measured areas of affective behavior.

(2) In only one of the cognitive measures, "the ability to correctly identify the level of education or training most likely needed by an occupation", did the experimental group show greater growth than did the control group.

(3) The null hypothesis:

> There will be no significant differences in the measured affective and cognitive behaviors of an experimental group of students counseled by counselors who participate in an inservice training program in vocational counseling and of a control group of students counseled by counselors who have not been exposed to the inservice training program

was supported.

DISCUSSION

The apparent failure of the project to achieve the predicted modifications in student behavior suggests the need to investigate

TABLE X

PERCENTAGE DISTRIBUTIONS OF RESPONSES TO QUESTIONS ON THE USE OF VOCATIONAL APTITUDE TESTS

N - Experimental Group = 60			N - Control Group = 60	
		Right (%)	Wrong (%)	Don't Know (%)
EXPERIMENTAL	Pre	8	29	63
	Post	8	25	67
CONTROL	Pre	8	29	63
	Post	7	28	65

TABLE XI

PERCENTAGE DISTRIBUTIONS OF RESPONSES TO QUESTIONS ON THE USE OF VOCATIONAL INTEREST INVENTORIES

N - Experimental Group = 60			N - Control Group = 60	
		Right (%)	Wrong (%)	Don't Know (%)
EXPERIMENTAL	Pre	8	29	63
	Post	11	22	67
CONTROL	Pre	8	29	63
	Post	10	25	65

possible reasons as to why there was no change or difference and possible considerations that would make future efforts at inservice training more effective. Several areas seem worthy of investigation.

First, the acceptance of the conclusions drawn must be considered tentative. The modification of student beahvior was premised on a change in counselor behavior. It would be presumptuous to assume that the inservice training would have produced the instant changes in counselor behavior which are requisite to the achievement of change in student behavior. In other words, changes in counselor behavior may not be communicated to the students until the 1972-73 school year. Since all of the subjects were in grades below 12, it can be expected that the students in the experimental group will in the 1972-73 school year be exposed to any change in counselor behavior which may have resulted from the counselor's participation in the inservice training. Even then, it cannot be expected that student changes will be evidenced in 1972-73 when the students are first exposed to the counselor's changed behavior. Rather, only after the students have had time to internalize the effects of this experience can measurable changes in student behavior be expected to appear.

Second, a prior acceptance of the effectiveness of an intensive, two week inservice training of six vocational counselors in the summer of 1971 led to the adoption of the curriculum of the inservice training without reference to the existing knowledge, skills and needs of the enrollees. The differences in the size of the two groups - 8 as compared to 30 - and the concentration and duration of the sessions - 10 days, 6 hours a day as opposed to 14 weeks, 3 hours a week - might have strongly influenced the effectiveness of the two programs. It is also possible that the initial needs of the two groups might have differed

significantly. Although all of the 24 enrollees in the inservice agreed that there is a need for counselor inservice training in vocational counseling and guidance, only 9 believed the inservice had provided the experiences they had expected or needed. Five stated their needs and expectations had only been partially met and 10 stated their needs and expectations had not been met to any significant degree. The failure to survey the enrollees to determine their felt needs and the expression by 15 of 24 of the enrollees that their felt needs had been met only in part or not at all deserve further investigation as to how these conditions affected the inservice training and how future inservice training programs could benefit from the experiences derived in the 1971-72 inservice training.

The existing inadequacy of the present vocational counseling and guidance afforded secondary school students is strongly supported by the following data gathered from the students' responses to the pre and post administration of the questionnaire.

1. Less than 60 percent of the students in either group were able, on either the pre or post administrations, to identify a career choice or a career in which they were interested.
2. Of those who did identify a career choice or a career in which they were interested, less than half of either group on either the pre or post administrations were able to identify or describe:
   (a) the job cluster to which the career belonged,
   (b) other jobs in the same cluster,
   (c) opportunities for advancement in the career
   (exception - "control, pre", 52%),
   (d) personal interests related to the career,

(e) employment opportunities in the career (exception - "experimental, post", 50%), and

(f) job requirements.

3. Less than 25 percent of either group on either administration of the questionnaire were able to identify or give requested information about two community agencies which could help them in gaining employment. Seventy-two percent of the students made no response to this question.

4. Less than 10 percent of the students in either group on either administration of the questionnaire were able to identify two vocational interest surveys and two aptitude tests which would be useful to them in making career decisions.

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APPENDIX

APPENDIX A

COURSE OF STUDY

The following objectives and strategies were utilized by the instructor in the inservice training program:

Objective

To increase the counselor's knowledge of occupations and occupational trends in the Sacramento area.

Strategies

Introduce:

1. Area Manpower Review
2. Labor Supply and Demand Summaries
3. Medical Services Survey

Utilize resource persons from:

1. Federal Interagency Board
2. Pacific Telephone Company
3. Human Resources Development

Objective

To strengthen the counselor's awareness of employers expectations and selected hiring practices in the Sacramento area.

Strategies

Introduce:

1. Survey of Sacramento Employers
2. Sacramento State College survey of Sacramento department stores
3. Sacramento State College survey of musical industry

Objective

To inform the counselors of trends in educational programming and philosophy.

Strategies

Present:

1. Occupation consultant publication
2. Marland Statement
3. Career counseling developments
4. The Bridge production

Utilize resource persons from:

1. State Department of Education
2. Sacramento County Schools

Objective

To increase the counselors' knowledge of training possibilities in the Sacramento area.

Strategies

Introduce:

1. Sacramento State College Handbook of area vocational schools
2. Sacramento State College guide to Sacramento area apprenticeship programs
3. Continuing education flyer
4. Sacrametno State College community colleges programs survey
5. Sacramento State College survey of community college programs
6. American River College follow-up study
7. Sacramento City College follow-up study

Utilize resource persons from:

1. Regional Occupational Program
2. Apprenticeship programs
3. Community Colleges

Incorporate: field trips to Regional Occupational Programs sites

Objective

To facilitate a greater counselor knowledge of financial aid program for educational purposes.

Strategies

Introduce:

1. Sacramento Area Economic Opportunity Council
2. National Association of Businessmen
3. Department of Rehabilitation
4. Economic Opportunity Programs
5. Scholarship survey

Utilize resource persons from area colleges.

Objective

To strengthen the counselor's awareness of career information sources and materials.

Strategies

Present:

1. Sacramento State College survey of career briefs
2. Human Resources Development occupational guides
3. Human Resources Development miniguides
4. Vital Information for Education and Work
5. Film list
6. Dictionary of Occupational Titles
7. Occupational Outlook Handbook
8. Federal Inter-Agency Board announcements and materials
9. California State Personnel Board announcements and materials
10. Tape presentations

Objective

To increase the counselor's knowledge of emerging career counseling related psychometrics.

Strategies

Present:

1. Career Planning Program
2. Self Directed Search (SAAS)
3. Judgement Orientation Behavior-Objective (JOB-O)
4. Non-Verbal Aptitude Test Battery

Utilize resource persons from:

1. American College Testing
2. Armed Forces
3. Boy Scouts

Objective

To increase the counselor's awareness of career counseling group activities and materials.

Strategies

Present:

1. Sacramento State College career group counseling materials
2. Career games
3. Sacramento State College lesson plans

APPENDIX B

SACRAMENTO COUNTY HIGH SCHOOLS
STUDENT QUESTIONNAIRE

NAME_____ COUNSELOR_____

GRADE_____ DATE_____

MALE_____ FEMALE_____ AGE_____

SCHOOL_____

1. Indicate how much you would use the following contacts or resources in OCCUPATIONAL PLANNING. Put an "X" in the proper column for each listed item.

OCCUPATIONAL PLANNING refers to such things as: Future career or job choice, job requirements, job opportunities, and local career or job outlook.

		Very Much	Much	Some	Little	Not At All
(1)	Counselors	___(a)	___(b)	___(c)	___(d)	___(e)
(2)	Teachers	___(a)	___(b)	___(c)	___(d)	___(e)
(3)	Administrators	___(a)	___(b)	___(c)	___(d)	___(e)
(4)	Friends	___(a)	___(b)	___(c)	___(d)	___(e)
(5)	Parents & Relatives	___(a)	___(b)	___(c)	___(d)	___(e)
(6)	Films & Pamphlets	___(a)	___(b)	___(c)	___(d)	___(e)
(7)	Work Experience	___(a)	___(b)	___(c)	___(d)	___(e)
(3)	Other (Please Indicate)*	___(a)	___(b)	___(c)	___(d)	___(e)

*_____.

Please turn to next page

2. How do you rate yourself (compared to others of your age or grade) in each of the following areas? Mark one choice for each item listed.

ABILITY

	OUTSTANDING	ABOVE AVERAGE	AVERAGE	BELOW AVERAGE	POOR
(1) Writing	___(a)	___(b)	___(c)	___(d)	___(e)
(2) Reading	___(a)	___(b)	___(c)	___(d)	___(e)
(3) Mathematics	___(a)	___(b)	___(c)	___(d)	___(e)
(4) Artistic	___(a)	___(b)	___(c)	___(d)	___(e)
(5) Athletic	___(a)	___(b)	___(c)	___(d)	___(e)
(6) Musical	___(a)	___(b)	___(c)	___(d)	___(e)
(7) Making good grades	___(a)	___(b)	___(c)	___(d)	___(e)
(8) Scientific	___(a)	___(b)	___(c)	___(d)	___(e)
(9) Mechanical	___(a)	___(b)	___(c)	___(d)	___(e)
(10) Leadership	___(a)	___(b)	___(c)	___(d)	___(e)
(11) Dramatic	___(a)	___(b)	___(c)	___(d)	___(e)
(12) Making Friends	___(a)	___(b)	___(c)	___(d)	___(e)
(13) Self-Discipline	___(a)	___(b)	___(c)	___(d)	___(e)
(14) Making reasonable decisions	___(a)	___(b)	___(c)	___(d)	___(e)
(15) Taking risks when necessary	___(a)	___(b)	___(c)	___(d)	___(e)

Please turn to next page

3. How do you rate yourself (compared to others of your age or grade) in each of the following areas? Mark one choice for each item listed.

INTEREST

		LIKE VERY MUCH	LIKE	INDIFFERENT	DISLIKE	DISLIKE VERY MUCH
(1)	Artistic	___(a)	___(b)	___(c)	___(d)	___(e)
(2)	Athletic	___(a)	___(b)	___(c)	___(d)	___(e)
(3)	Dramatic	___(a)	___(b)	___(c)	___(d)	___(e)
(4)	Leadership	___(a)	___(b)	___(c)	___(d)	___(e)
(5)	Making Friends	___(a)	___(b)	___(c)	___(d)	___(e)
(6)	Making reasonable decisions	___(a)	___(b)	___(c)	___(d)	___(e)
(7)	Mathematics	___(a)	___(b)	___(c)	___(d)	___(e)
(8)	Making good grades	___(a)	___(b)	___(c)	___(d)	___(e)
(9)	Mechanical	___(a)	___(b)	___(c)	___(d)	___(e)
(10)	Musical	___(a)	___(b)	___(c)	___(d)	___(e)
(11)	Reading	___(a)	___(b)	___(c)	___(d)	___(e)
(12)	Scientific	___(a)	___(b)	___(c)	___(d)	___(e)
(13)	Self-discipline	___(a)	___(b)	___(c)	___(d)	___(e)
(14)	Taking risks when necessary	___(a)	___(b)	___(c)	___(d)	___(e)
(15)	Writing	___(a)	___(b)	___(c)	___(d)	___(e)

Please turn to next page

4. Below are a number of statements about school, occupations and making decisions. Read each statement carefully and place a check by the appropriate letter, depending on how strongly you agree or disagree with the statement. If you disagree about as much as you agree with a statement, check column three which says, "Neither Agree or Disagree".

	STRONGLY AGREE	AGREE	NEITHER AGREE OR DISAGREE	DISAGREE	STRONGLY DISAGREE
(1) Any job decision I will make will be strongly influenced by the advice received from others.	___(a)	___(b)	___(c)	___(d)	___(e)
(2) The record I make in high school influences what happens to me in the future.	___(a)	___(b)	___(c)	___(d)	___(e)
(3) My school has helped me improve my understanding of my abilities and interests and how these relate to possible occupational choices.	___(a)	___(b)	___(c)	___(d)	___(e)
(4) A person can do anything if he really wants to succeed and tries hard enough.	___(a)	___(b)	___(c)	___(d)	___(e)
(5) Every student should plan to apply to a college or university.	___(a)	___(b)	___(c)	___(d)	___(e)
(6) The best way to plan the future is to decide on an occupation and stick to it.	___(a)	___(b)	___(c)	___(d)	___(e)
(7) I really don't know what my main abilities are.	___(a)	___(b)	___(c)	___(d)	___(e)
(8) I will be the person most responsible for seeking out job or occupational information when I feel I am ready or interested in a job.	___(a)	___(b)	___(c)	___(d)	___(e)
(9) Planning ahead is pointless: decisions should be made when the time arrives, not before.	___(a)	___(b)	___(c)	___(d)	___(e)
(10) It's important to learn what it takes to get into various occupations.	___(a)	___(b)	___(c)	___(d)	___(e)
(11) No matter what a person does he can't change his abilities very much.	___(a)	___(b)	___(c)	___(d)	___(e)
(12) I will trust my own judgement when it comes to making a decision about a job.	___(a)	___(b)	___(c)	___(d)	___(e)
(13) The courses I take in school don't have much to do with my occupational goals.	___(a)	___(b)	___(c)	___(d)	___(e)

Please turn to next page

5. What is the most likely level of education or training you would need for each of the following occupations. Check only one column for each occupation.

DO NOT GUESS. If you don't know the answer, mark the column "Don't Know".

	High School	Apprenticeship	Technical School	Some College	4 Years	More than 4 Years	Don't Know
(1) Doctor	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(2) Plumber	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(3) Chemical engineer	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(4) Lawyer	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(5) Clerk in a department store	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(6) Barber	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(7) Architect	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(8) High School English teacher	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(9) Policeman	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(10) Truck driver	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(11) Nurse	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(12) Secretary	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(13) Electronics Technician	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(14) Computer Programmer	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(15) Electrician	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(16) Social worker	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(17) Department store manager	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(18) Auto mechanic	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)
(19) Airline stewardess	___(a)	___(b)	___(c)	___(d)	___(e)	___(f)	___(g)

Please turn to next page

6. The purpose of this part of the questionnaire is to measure the meanings of certain kinds of jobs as judged by high school students. In answering make your responses on the basis of what these jobs mean to you. There are twelve different jobs to be judged and under each job five sets of scales. Rate the jobs on each of the scales in order.

Here is how to use these scales. If you feel that the job above the scales is very closely related to one end of the scale, place a check-mark as below:

soft X : ___ : ___ : ___ : ___ : ___ : ___ : hard

or

soft ___ : ___ : ___ : ___ : ___ : ___ : X : hard

If you feel that the job is quite closely related to one end or the other of the scale (but not extremely), place a check-mark as follows:

hot ___ : X : ___ : ___ : ___ : ___ : ___ : cold

or

hot ___ : ___ : ___ : ___ : ___ : X : ___ : cold

If the job title seems only slightly related to one side or the other (but is not neutral), then check as follows:

empty ___ : ___ : X : ___ : ___ : ___ : ___ : full

or

empty ___ : ___ : ___ : ___ : X : ___ : ___ : full

If you consider the job to be neutral on the scale--that is, both ends of the scale are equally related with the job or if the scale is completely meaningless to the job, then a check-mark in the middle space, as follows:

fast ___ : ___ : ___ : X : ___ : ___ : ___ : slow

The end toward which you check depends upon which of the two ends of the scale seem most descriptive of the job you are judging.

IMPORTANT (1) Place your check-marks in the middle of spaces, not on the edges.

			This		Not This	
___ :	___ :	___ :	X	: ___ :	X	: ___

(2) Check every scale for every job -- do not omit any scale.

(3) Do not put more than one check-mark on a single scale.

Please turn to the next page.

The scales may be the same for some jobs but the jobs are all different. Do not look back and forth through the questions. You should not try to remember how you checked those which seem alike. You should make each decision separately. Work as quickly as you can through the questions. Do not worry or puzzle over the questions as your first impression or "feeling" about the question is what is wanted. On the other hand, you should not be careless, because your true feeling is what is wanted.

Please turn to the next page

and start rating the jobs.

TYPIST

low	___ :	___ :	___ :	___ :	___ :	___ :	___	high
valuable	___ :	___ :	___ :	___ :	___ :	___ :	___	worthless
good	___ :	___ :	___ :	___ :	___ :	___ :	___	bad
unimportant	___ :	___ :	___ :	___ :	___ :	___ :	___	important
meaningful	___ :	___ :	___ :	___ :	___ :	___ :	___	meaningless

CARPENTER

good	___ :	___ :	___ :	___ :	___ :	___ :	___	bad
low	___ :	___ :	___ :	___ :	___ :	___ :	___	high
meaningful	___ :	___ :	___ :	___ :	___ :	___ :	___	meaningless
valuable	___ :	___ :	___ :	___ :	___ :	___ :	___	worthless
unimportant	___ :	___ :	___ :	___ :	___ :	___ :	___	important

BOOKKEEPER

worthless	___ :	___ :	___ :	___ :	___ :	___ :	___	valuable
bad	___ :	___ :	___ :	___ :	___ :	___ :	___	good
important	___ :	___ :	___ :	___ :	___ :	___ :	___	unimportant
low	___ :	___ :	___ :	___ :	___ :	___ :	___	high
meaningless	___ :	___ :	___ :	___ :	___ :	___ :	___	meaningful

TELEPHONE LINEMAN

high	___ :	___ :	___ :	___ :	___ :	___ :	___	low
meaningless	___ :	___ :	___ :	___ :	___ :	___ :	___	meaningful
bad	___ :	___ :	___ :	___ :	___ :	___ :	___	good
important	___ :	___ :	___ :	___ :	___ :	___ :	___	unimportant
worthless	___ :	___ :	___ :	___ :	___ :	___ :	___	valuable

Please turn to next page

TELEPHONE OPERATOR

good	___ :	___ :	___ :	___ :	___ :	___ :	___	bad
valuable	___ :	___ :	___ :	___ :	___ :	___ :	___	worthless
low	___ :	___ :	___ :	___ :	___ :	___ :	___	high
important	___ :	___ :	___ :	___ :	___ :	___ :	___	unimportant
meaningful	___ :	___ :	___ :	___ :	___ :	___ :	___	meaningless

AUTOMOBILE MECHANIC

low	___ :	___ :	___ :	___ :	___ :	___ :	___	high
meaningful	___ :	___ :	___ :	___ :	___ :	___ :	___	meaningless
important	___ :	___ :	___ :	___ :	___ :	___ :	___	unimportant
worthless	___ :	___ :	___ :	___ :	___ :	___ :	___	valuable
good	___ :	___ :	___ :	___ :	___ :	___ :	___	bad

MAIL CARRIER

low	___ :	___ :	___ :	___ :	___ :	___ :	___	high
meaningful	___ :	___ :	___ :	___ :	___ :	___ :	___	meaningless
bad	___ :	___ :	___ :	___ :	___ :	___ :	___	good
valuable	___ :	___ :	___ :	___ :	___ :	___ :	___	worthless
unimportant	___ :	___ :	___ :	___ :	___ :	___ :	___	important

BEAUTICIAN

worthless	___ :	___ :	___ :	___ :	___ :	___ :	___	valuable
low	___ :	___ :	___ :	___ :	___ :	___ :	___	high
meaningful	___ :	___ :	___ :	___ :	___ :	___ :	___	meaningless
unimportant	___ :	___ :	___ :	___ :	___ :	___ :	___	important
good	___ :	___ :	___ :	___ :	___ :	___ :	___	bad

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PLUMBER

meaningless	___ :	___ :	___ :	___ :	___ :	___ :	___	meaningful
important	___ :	___ :	___ :	___ :	___ :	___ :	___	unimportant
low	___ :	___ :	___ :	___ :	___ :	___ :	___	high
valuable	___ :	___ :	___ :	___ :	___ :	___ :	___	worthless
bad	___ :	___ :	___ :	___ :	___ :	___ :	___	good

PRACTICAL NURSE

unimportant	___ :	___ :	___ :	___ :	___ :	___ :	___	important
worthless	___ :	___ :	___ :	___ :	___ :	___ :	___	valuable
meaningless	___ :	___ :	___ :	___ :	___ :	___ :	___	meaningful
low	___ :	___ :	___ :	___ :	___ :	___ :	___	high
bad	___ :	___ :	___ :	___ :	___ :	___ :	___	good

BARBER

good	___ :	___ :	___ :	___ :	___ :	___ :	___	bad
low	___ :	___ :	___ :	___ :	___ :	___ :	___	high
meaningful	___ :	___ :	___ :	___ :	___ :	___ :	___	meaningless
unimportant	___ :	___ :	___ :	___ :	___ :	___ :	___	important
valuable	___ :	___ :	___ :	___ :	___ :	___ :	___	worthless

SHORT ORDER COOK

bad	___ :	___ :	___ :	___ :	___ :	___ :	___	good
unimportant	___ :	___ :	___ :	___ :	___ :	___ :	___	important
meaningful	___ :	___ :	___ :	___ :	___ :	___ :	___	meaningless
worthless	___ :	___ :	___ :	___ :	___ :	___ :	___	valuable
high	___ :	___ :	___ :	___ :	___ :	___ :	___	low

Please turn to next page

10. If you have made a career choice, give the name of the occupation (job): _____.

If you have not made a career choice, give the name of an occupation in which you think you might be interested: _____.

Answer the following questions as they apply to the occupation you have named in response to the above question:

1. Name of the job family or job cluster in which this occupation (job) is found: _____.

2. Give as many other occupations as you can which are also found in this "family" or "cluster": _____ _____.

3. What is the minimum level of education required for the occupation: (check one) ___ high school, ___ 1 or 2 years beyond high school, ___ 4 years of college, ___ more than 4 years of college.

4. Which if any of the following aptitudes would be helpful in the occupation: (check as many as you believe are appropriate) ___mathematical ___verbal ___abstract ___spacial ___mechanical ___clerical.

5. How would you rate the opportunities for advancement offered by the occupation? ___excellent ___very good ___good ___average ___below average

6. Which of your interests are related to this occupation? (Name as many as you believe are appropriate). _____ _____.

7. How would you rate employment opportunities in this occupation? (check only one) ___excellent ___very good ___good ___average ___below average

8. Which of the following are generally required for employment in the occupation? (check as many as you believe are appropriate) ___License or Credential ___Examination (written) ___Apprenticeship ___Union Membership

11. List as many community agencies as you can which might help you find employment. Identify each agency as to whether it is public or private and whether it charges a fee for the service or does not charge a fee.

For example: (1) Jones Employment Service - private - charges a fee
(2) San Mateo Municipal Employment Office - public - no fee charge

_____
_____
_____
_____
_____

Please turn to the next page

12. If you were trying to find out what types of jobs or occupations you would be good at, which of the following would you use?

Check as many as you believe are appropriate

A. ___ Differential Aptitude Test
B. ___ General Aptitude Test Battery
C. ___ Mooney Problem Checklist
D. ___ California Mental Maturity Test
E. ___ Flannigan Aptitude Classification Test
F. ___ Don't Know

13. If you were trying to find out what types of jobs or occupations you would enjoy doing, which of the following would you use?

Check as many as you believe are appropriate

A. ___ Strong Vocational Interest Blank
B. ___ Differential Aptitude Test
C. ___ Kuder Preference Record
D. ___ Mooney Problem Checklist
E. ___ Ohio Vocational Interest Survey
F. ___ Don't Know

THANK YOU

APPENDIX C

May 24, 1972

TO: Participants in the Vocational Counseling Inservice

FROM: Del Firme, Ed.D., Consultant, County Office

We wish to thank you for giving your valuable time to take part in the inservice program for career counseling. Although an evaluation of the program is being made, it is directed exclusively to changes in student behavior. Because we believe that a most important intervening variable is the school counselor, we are most anxious to get your reactions to the inservice experiences. Will you please take a few minutes to answer the questions which follow? (The confidentiality of all responses will be respected.)

1. Do you believe there is a need for the inservice training of counselors in vocational and/or career education?

yes____ no____

Comments:

2. Did the inservice provide the experiences which you had expected?

yes____ no____

If your answer is 'no', a statement of the reasons for your answer will be most appreciated.

3. Please list suggestions, on the back of this memo, as to how the inservice could have been made more effective.

APPENDIX D

COUNSELOR INSERVICE TRAINING ENROLLEES

ELK GROVE DISTRICT

Lou Chirco	Elk Grove H.S.
David Morse	Elk Grove H.S.
David Johnson	Elk Grove H.S.
Jean Shenk	Elk Grove H.S.
Shirley Bergen	Elk Grove H.S.
Norman Newmen	Daylor H.S. - El Escalon

FOLSOM-CORDOVA DISTRICT

Lewis Fallon	Kinney H.S. - El Escalon

GALT DISTRICT

Therese Brelivet	Grant H.S.
Warren Popp	Grant H.S.
Lew Harris	Highlands H.S.
Don Spindler	Highlands H.S.
Gloria Laun	Rio Linda H.S.
Bob Mattarola	Vista Nueva H.S. - El Escalon
Adele Nibler	Highlands H.S.

RIVER DELTA DISTRICT

John Dinubilo	Delta H.S.

SACRAMENTO CITY DISTRICT

Lucille Newton	American Legion H.S. - El Escalon
James DeLeon	Lincoln Continuation H.S. - El Escalon
Michael Gill	McClatchy H.S.
Betty Williams	McClatchy H.S.
George Marshall	Johnson H.S.
David Campbell	Johnson H.S.
Graham Lahey	Kennedy H.S.
Jim Harrold	Kennedy H.S.
Jack Howard	Sacramento H.S.

SAN JUAN DISTRICT

Patrick Richard	La Sierra H.S. - 9th
Jack Webb	La Vista H.S. - El Escalon
Aileen Lorente	Bella Vista H.S. - 11th
Paul Peterson	Del Campo H.S. - 11th
Millard Stroh	La Sierra H.S.
Doug Briein	Mira Loma H.S. - 11th